



Guatemalan Potato Moth

Tecia solanivora

The Potato moth is most likely indigenous to Guatemala but it has extended its range through Central and South America and Mexico. It can potentially spread internationally through potato shipping which carries the eggs, larvae, and pupae. Spreading may also occur through shipping egg and pupae infested soil, potato plants, reused potato bags, and illegal potato shipping. This pest is able to adapt to different climate zones from subtropical to mildly colder zones where the plant hardiness zone is 7-13.



Tuber damage by *Tecia solanivora* larvae, photo by Cornell University

Damage:

This pest is considered to be one of the most serious and destructive pests of potatoes. The larvae feed throughout the potato producing holes (galleries) that collect residues of food, waste (frass), and shed skin which contaminates the potato. An infestation can destroy many tubers within the season and there can be an unknown infestation unless the larvae exit the tubers leaving visible exit holes, potatoes are sliced to check the insides, or rotted potatoes are found. Larvae survive and often thrive, in storage facilities.

Photos:

ChemTica. *Tecia solanivora*. Adult *T. solanivora* photo. 2015. April 2015. <http://www.chemtica.com/site/?p=3118>
Ramanujan, Krishna. [Moth larvae saliva boosts yield of Colombian spud](http://phys.org/news194111605.html). Tuber damage by *T. solanivora*. May 2010. April 2015. <http://phys.org/news194111605.html>

Information: Cooperative Agricultural Pet Survey. [Solanaceous Hosts Commodity-based Survey](https://caps.ceris.purdue.edu/node/579). April 2015. <https://caps.ceris.purdue.edu/node/579>



Adult *T. solanivora*, photo by Chemtica

Description:

Eggs are white and are usually found near the base of the plant, uncovered tubers, and occasionally on foliage. Larvae hatch with a transparent-white color which then turns to a cream color with darker brown spots, then a yellow-green with darker spots. They burrow into tubers where they feed and grow. When they are ready to pupate, they exit the potato into the soil, close to the surface, where they form a cocoon of silk and other material. In storage facilities, they can make cocoons anywhere (e.g. walls, potato sack, etc.). Adults are nocturnal and fly short distances while staying close to the ground. They are small and have a brown camouflage coloration which makes them hard to find on the ground, among leaves, tree trunks and shaded areas where they rest.